What is claimed is:

 A polyurethane resin composition comprising a polyisocyanate, a polyhydroxy compound and an aromatic polyamine,

wherein said polyisocyanate is 4,4'-methylenebis(cyclohexyl isocyanate) or isophorone diisocyanate.

- 2. A polyurethane resin composition as claimed in claim 1 wherein said polyhydroxy compound is a polyether diol or a polyester diol having an average molecular weight of 700-1200 or their mixture.
- 3. A polyurethane resin composition as claimed in claim 1 wherein said aromatic polyamine is 4,4'-methylene-bis(2-chloroaniline).
- 4. A polyurethane resin composition as claimed in claim 1 wherein said polyisocyanate and said polyhydroxy compound are reacted so that the reaction molar ratio of said polyisocyanate to said polyhydroxy compound (NCO/OH) is 2.5 to 4.0 and the NCO content of a polyurethane prepolymer obtained is 7.0 to 14.0%.
- 5. An impact-resistant optical lens formed by casting the polyurethane resin composition for casting claimed in

any of claims 1-4.

- 6. An impact-resistant optical lens as claimed in claim 5 wherein it is a transparent lens, sunglass lens or polarized lens.
- 7. A method of casting a polyurethane resin comprising the steps of reacting a polyisocyanate with a polyhydroxy compound to obtain a polyurethane prepolymer so that the reaction molar ratio (NCO/OH) will be 2.5 to 4.0, curing the polyurethane prepolymer obtained having an NCO content of 7.0 to 14.0% with an aromatic polyamine so that the reaction molar ratio (NCO/NH $_2$ ) will be 1.10 to 0.90, and casting and curing at 60-120 °C.